SECRETARY'S ENVIRONMENTAL ASSESSMENT REPORT FOR A COASTAL ZONE ACT PERMIT APPLICATION

Re: Mountaire Farms of Delaware, Inc.

September 2010

Introduction

As required by the "Regulations Governing Delaware's Coastal Zone" (Section H.3 [d]) dated May 11, 1999, and amended October 1, 2001, the Secretary is required to make an environmental assessment of the impact(s) of the project on the Coastal Zone of Delaware. This is done by evaluating the project's likely impact on the statutory criteria and making a preliminary determination of the sufficiency of the Offset Proposal. The following is such an environmental assessment of the proposed project described in an application for a Coastal Zone Act (CZA) Permit, received from Mountaire Farms of Delaware, Inc.

The fact that DNREC considers an application to be preliminarily, administratively complete does not constitute the Department's position as to whether the application should be approved or denied. That decision will not be made until after the public hearing. The purpose of the Secretary's written assessment is to assist the applicant and the public to focus on issues presented in the application. It constitutes an administrative determination that the application is sufficient to proceed to a public hearing. In addition, should the Department eventually issue the CZA Permit, it does not automatically guarantee the applicant will receive other required permits.

The Proposed Project

Mountaire is seeking a permit to construct and operate a resource recovery facility within the existing Mountaire Farms of Delaware, Inc. complex, located on the south side of State Route 24, east of Millsboro.

The proposed operation consists of recovering unused protein (blood, feathers, and offal) from the Mountaire Millsboro and Selbyville poultry processing plants, farms, and hatcheries; transporting those raw materials to the resource recovery facility by tractor-trailer; offloading the raw materials into receiving bins located within the facility; sizing, conditioning, and hydrolyzing the raw materials; and loading the final products (hydrolyzed feather and poultry meal and feed grade fat) on trucks for shipping to a variety of points of use.

Sufficiency Statement

This application for a CZA Permit, including supplemental information, has been reviewed by the Department to determine its completeness. After a thorough review of the company's application and file, the Department considers this application to be administratively complete and sufficient for proceeding to public hearing.

Environmental Assessment

Mountaire's project will produce approximately 355 pounds per day of Total Nitrogen, a substance regulated by DNREC Permit #LTS 5011-87-04. There will be an increase in air emissions, detailed in the table below. There will be no discharges of stormwater to surface waters. Water (used for boiler steam, cooling tower makeup, scrubber makeup, and cleanup; averaging approximately 489,400 gallons per day) will be supplied through groundwater from the Columbia aquifer. There will be one dumpster load of solid waste per week consisting of aprons, shackles, knives, etc.; solid waste will be transported to the Delaware Solid Waste Authority landfill in Sussex County, outside the Coastal Zone. There will be no hazardous waste. Because this operation will be taking place within the existing Mountaire facility footprint, there will be no impacts to wildlife habitat. Odors will be abated through thermal oxidation.

Offset Proposal

Mountaire will upgrade and expand the existing wastewater treatment facility (WWTF) to decrease the Total Nitrogen being applied to crop land below current levels, thereby precluding the need for an offset for land applied nitrogen in the treated wastewater. The proposed upgrades to the WWTF would include abandoning the existing oxidation ditch and replacing it with a state-of-the-art Biological Nutrient Removal (BNR) system. According to DNREC's Ground Water Discharges Section, the BNR system will be able to significantly reduce the total nitrogen concentration in the wastewater by increasing the denitrification capabilities of the WWTF. The current effluent nitrogen concentrations average is 48 mg/l. CABE's report states the design effluent nitrogen concentration from the BNR treatment system would be 15.6 mg/l. This represents a 67% reduction in the effluent nitrogen concentration.

Mountaire's current Wastewater Spray Irrigation permit limits influent flow to 2.6 Million Gallons per Day (MGD). Current flows are averaging just over 2.0 MGD. If we account for the additional 214,000 gallons per day associated with the resource recovery plant, and assume the effluent nitrogen concentration will be 15.6 mg/l, the annual nitrogen load from the WWTF would be 105,000 pounds of nitrogen annually; whereas the nitrogen load from 2009 was 292,000 pounds. This represents a 64% reduction in the nitrogen load from the WWTF if the BNR system is constructed.

With regard to air emissions, Mountaire is voluntarily replacing two of the three complex boilers in August 2010 and will fire the new boilers on natural gas rather than No. 6 fuel oil. This replacement will reduce complex air emissions by approximately 71 tons per year. The emissions increase attributable to the resource recovery project, using natural gas as fuel, required offset and actual offset are as follows:

	Emissions Increase (TPY)	Required Offset (1.3 x Emissions Increase) (TPY)	Actual Offset (TPY)
SOx	0.003	0.004	* 0.004
NOx	10.0	13.0	*13.0
СО	0.033	0.043	* 0.043
VOC	0.029	0.038	* 0.038
PM-10	0.20	0.26	* 0.26
TOTAL	10.3	13.4	13.4

The Department's Division of Air, Air Quality Management Section agreed with these offset calculations.

*The balance of available offset due to the change of boiler fuel for two of the three complex boilers described above is being held in reserve should additional projects subject to Delaware's Regulations Governing Delaware's Coastal Zone be necessary. This balance is quantified at approximately 58 tons.

Conclusion

The company's application is preliminarily administratively complete.

Approved:

Collin P. O'Mara

Secretary

Date: